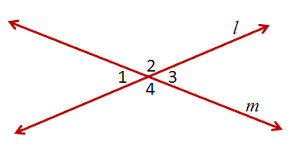
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**2.11 Introduction to Geometric Proofs**



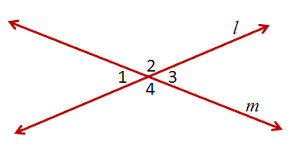
Write three conclusions you know to be true, given the diagram on the left.

1.

2.

3.

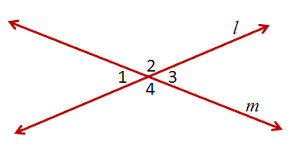
**What is a proof?**

**1.**

**Given**:

**Prove:**

|  |  |
| --- | --- |
| **STATEMENTS** | **REASONS** |
| 1) | 1) |
| 2) and are vertical angles | 2) |
| 3) | 3) |
| 4) | 4) |
| 5) | 5) |

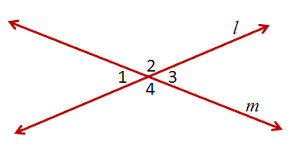


**2.**

**Given**:

**Prove:**

|  |  |
| --- | --- |
| **STATEMENTS** | **REASONS** |
| 1) | 1) |
| 2) | 2) definition of vertical angles |
| 3) | 3) |
| 4) | 4) definition of congruent angles |
| 5) | 5) |

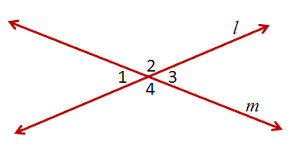


**3.**

**Given**:

**Prove:**

|  |  |
| --- | --- |
| **STATEMENTS** | **REASONS** |
| 1) | 1) |
| 2) and are a linear pair | 2) |
| 3) | 3) |
| 4) | 4) |
| 5) | 5) |



**4.**

**Given**:

**Prove:**

|  |  |
| --- | --- |
| **STATEMENTS** | **REASONS** |
| 1) | 1) |
| 2) | 2) definition of a linear pair |
| 3) | 3) |
| 4) | 4) |
| 5) | 5) Subtraction Property |

